

# 1978 MARINE MAMMAL RESEARCH EXPEDITIONS



r/v **Regina Maris**



### **Expedition #7**

## **HUMPBACK WHALE CENSUS IN THE TROPICAL NORTH ATLANTIC**

**13 April to 10 May 1978 Tuition \$1400**

This cruise involves strip-census studies of humpback whales (*Megaptera novaeangliae*) on the banks north of the Dominican Republic, where the Western North Atlantic population of this species migrates to breed and calve. r/v **Regina Maris** has been conducting regular censuses of these whales since December, before the whales arrived. The data gathered will provide information on the seasonality, group composition, and abundance of humpback whales in the area. This will be the last cruise to these banks, at a time when most of the whales will have departed for the summer feeding grounds. The population decline on the banks will be monitored until it reaches zero, and then the ship will cruise through the windward Bahama Islands, beachcombing and searching for evidence of whales that have dropped out of the usual migration. The cruise will begin in Puerto Plata, Dominican Republic and terminate in Miami, Florida.

### **Expedition # 8**

## **SEARCH FOR THE CARIBBEAN MONK SEAL**

**1 June to 28 June 1978 Tuition \$2000**

The Caribbean Monk Seal (*Monachus tropicalis*) is one of three species of tropical monk seals in the world, and it is probably extinct. This species was abundant in the West Indies when Columbus discovered America, and it was subsequently decimated by "fishers" and sealers, who found these seals unafraid of man, and, therefore, an easy prey. The most recent known colony of these seals was at Serranilla Bank, off Jamaica, but it was a very small group that has not been seen since 1952. r/v **Regina Maris** will visit Pedro Bank, Serranilla Bank, Serrana Bank, and other reefs and islets in the Western Caribbean Sea, in an effort to locate any survivors of the species, so that they and their habitat may be protected. The cruise will begin in Miami, Florida and terminate in Panama City, Panama.

### **Expedition #9**

## **TUNA—PORPOISE STUDIES PART I**

**5 July to 13 August 1978 Tuition \$3000**

Everyone knows that there is a very serious problem in the tuna-porpoise purse seine fishery...that is: tens of thousands of oceanic porpoises (mostly *Stenella longirostris* and *S. attenuata*) die by drowning in the nets during the fishing operations. Much effort is going into studies of various aspects of the problem, and much is being done to remedy the situation. One looming question concerns the range of distribution for the porpoise species involved, and another concerns their number. Most past, present and proposed studies focus on the fishing area in the Eastern Tropical Pacific Ocean, and, therefore, are geographically biased. r/v **Regina Maris** will supplement those studies by sailing porpoise census tracks offshore along the southwestern boundary of the fishing area (i.e. south and west of the Galapagos Islands), to define the limits of distribution of the species



encountered, and to define the oceanographic conditions of their habitat. The ship will sail among and stopover at the Galapagos Islands to allow Ecuadorian participation and to pay homage to the birthplace of evolutionary biology. The cruise will begin in Panama City, Panama and will terminate in Ecuador. Conversational ability in Spanish is recommended.

**Expedition #10**

**TUNA—PORPOISE STUDIES PART II**

**20 August to 1 October 1978 Tuition \$3000**

Aside from the problem of understanding the distribution and numbers of porpoise species involved in the tuna-porpoise fishery, there are problems with understanding their behavior. Continuing studies of porpoise behavior focus on the tuna-porpoise "bond", seeking ways to efficiently separate the species during fishing operations. r/v **Regina Maris** will supplement existing studies with observations of the natural behavior of porpoise schools in naive or unfished populations. The daily activities and travels of the unfished schools can then be compared to those of fished schools, to better evaluate the impact of fishing operations on porpoises which survive. The ship will probably operate in the vicinity of the Galapagos Islands, with stopovers to allow Ecuadorian participation, and to provide opportunities for landbased studies of marine mammals and seabirds. The cruise will begin in Ecuador and terminate in Puntarenas, Costa Rica. Conversational ability in spanish is recommended.

**Expedition #11**

**TUNA—PORPOISE STUDIES PART III**

**15 October to 5 November 1978 Tuition \$2000**

Perhaps the most depleted porpoise species in the tuna-porpoise fishery is the inshore spotted porpoise (a subspecies or variety of **Stenella attenuata**). This stock was fished heavily in the early days of the fishery before conservation measures and legal protection were afforded. American tuna fishermen are not allowed to set on this type of porpoise, hence studies of the present condition must rely upon observation. r/v **Regina Maris** will sail porpoise census tracks on and off the continental shelf from Costa Rica to Western Central Mexico, estimating numbers of this and other species sighted. Selected island and mainland shorelines of the region will be beachcombed for salvage of stranded specimens of all cetaceans that inhabit the Eastern Tropical Pacific Ocean. The cruise begins in Puntarenas, Costa Rica and terminates in Mazatlan, Mexico. Conversational ability in Spanish is recommended.

**Expedition #12**

**GREAT WHALES IN THE SEA OF CORTEZ**

**8 November to 17 December 1978 Tuition \$2500**

At least six species of great whale (humpback, blue, fin, Bryde's, gray, and sperm) inhabit the waters of the Gulf of California, also known as the Sea



of Cortez. No systematic study of their distribution and population status has ever been undertaken, though several efforts have been made toward their exploitation. r/v **Regina Maris** will sail numerous census tracks in the Sea of Cortez from Mazatlan to San Felipe, and back to La Paz near the tip of Baja California, in an effort to estimate the abundance of these species in the area at this time of year. Selected shorelines of the region will be beachcombed for stranded specimens of all cetaceans that inhabit the Gulf. One species of porpoise (**Phocoena sinus**) is only known from a few netted or stranded specimens...we hope to be among the first biologists to see it alive. The cruise will begin in Mazatlan, Mexico and will terminate in La Paz, Mexico. Conversational ability in Spanish is recommended.



An academic program for college credit is sponsored by the Harvard University Commission on Extension Courses under the supervision of Dr. George Nichols of the Harvard Medical School Faculty. Students may earn 4 credits for work completed in Marine Mammal Biology and 2 credits for work completed in Celestial Navigation.

Costs are based upon the expense of administration and operation of the ship. Research grants, contracts, and contributions which help meet these expenses will be reflected in savings to student participants. The Ocean Research and Education Society, Inc. reserves the right to change the ship's schedule and itinerary as necessary. For more information and application materials, please write or call:

**The Ocean Research and Education Society, Inc.**

**51 Commerical Wharf 6**

**Boston, Massachusetts 02110**

**617-523-3455**

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